

REMARKS

After entry of the amendments accompanying this Request for Continued Examination, claims 1-2 and 8-9 are pending in this application. Applicant has canceled claims 5 and 6 and amended claim 1. No new matter has been added.

Rejection Under 35 U.S.C. § 112

Claims 1-2, 5-6 and 8-9 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Applicant respectfully traverses this rejection.

In the third paragraph on page 7 of the Specification, Applicant discloses that the "microcomputer includes a plurality of modes, for example, a single-chip mode that loads a program of the internal ROM to be operated, and a microprocessor mode that loads a program from the external memory to be operated" The second paragraph on page 8 states "This 8Dh is assumed to be a lock code prohibiting any mode other than the single chip mode." Thus, the first mode of claim 1 corresponds to the microprocessor mode, and the second mode of claim 1 corresponds to the single-chip mode.

Furthermore, in the fifth paragraph on page 9 and in Fig. 3, Applicant discloses three kinds of memory maps. The first memory map (Fig. 3A) includes the address space for the program EEPROM and the masked ROM. The second memory map (Fig. 3B) includes the address space for the program EEPROM but does not include the masked ROM. The program EEPROM in the second memory map is allocated to the address space F000h and that address space is for the mask ROM in the first memory map.

Accordingly, Applicant respectfully submits that the written description is clear enough to enable a person of ordinary skill in the art to make and use the claimed subject matter and requests that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. § 112, first paragraph. This logic also disposes of the rejection of claims 2 and 8-9, which depend from claim 1. The cancellation of claims 5 and 6 renders the rejection of those claims moot.

Rejections Under 35 U.S.C. § 103

Claims 1-2, 6 and 8-9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Sibigroth U.S. Patent No. 5,432,950. Claim 5 was rejected under 35 U.S.C. § 103(a) as unpatentable over Sibigroth and Phillips U.S. Patent No. 6,505,279. Applicant respectfully traverses these rejections.

Claim 1 has been amended to recite, *inter alia*, that the internal memory has a first program memory and a reprogrammable nonvolatile memory including a first area storing program codes and a second area storing user data, and in which a lock code is written in a specified area. A further amendment states that when a predetermined first value is set into said specified area as the lock code, the microcomputer is configured to be set into the second mode. When a second value is set into said specified area as the lock code, the central processing unit fetches instructions from the first area of the reprogrammable nonvolatile memory instead of the first program memory by the reprogrammable nonvolatile memory allocating on the address area to be allocated to the first program memory. Support for these amendments may be found, for example, on pages 7-10 of Applicant's specification.

Applicant respectfully submits that neither Sibigtroth nor any of the other cited references teaches or suggests the same combination of elements. For example, Sibigtroth discloses a secure processor having an on-chip memory. The secure processor carries out the secure mode by selectively isolating internal data/instruction bus transfer activity from an external data/instruction bus. The secure processor has an isolation buffer for isolating between the internal data/instruction bus and the external data/instruction bus.

However, Sibigtroth does not disclose that the secure processor includes the program EEPROM and the mask ROM, and that the program EEPROM is allocated to the memory space, which is for the mask ROM in another mode, when the second value is set into the specified area as the enable signal indicating the secure mode.

Accordingly, the obviousness rejection of claim 1 should be withdrawn. This logic also disposes of the rejection of claims 2 and 8-9, which depend from claim 1. The separate rejection of claim 5 has been rendered moot because of its cancellation.

Conclusion

For the foregoing reasons, Applicant respectfully submits that this application is in immediate condition for allowance and all pending claims are patentably distinct from the cited references. Reconsideration and allowance of all pending claims are respectfully requested.

In the event that there are any questions about this application, the Examiner is requested to telephone Applicant's undersigned representative so that prosecution of the application may be expedited.

If additional fees are required for any reason, please charge Deposit Account
No. 02-4800 the necessary amount.

Respectfully submitted,

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